

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION**

In the Matter of)	
Petition of WorldCom, Inc. Pursuant)	
to Section 252(e)(5) of the)	
Communications Act for Expedited)	
Preemption of the Jurisdiction of the)	CC Docket No. 00-218
Virginia State Corporation Commission)	
Regarding Interconnection Disputes)	
with Verizon-Virginia, Inc., and for)	
Expedited Arbitration)	

**DIRECT TESTIMONY OF
DONATO GRIECO AND GARY BALL**

(Issues I-1, I-2, I-4, I-5, I-6, III-1, III-2, III-3, III-5, IV-1, IV-2)

July 31, 2001

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1 **INTRODUCTION**

2 **Q. Please state your names, titles, and addresses.**

3 A. My name is Donato Grieco. I am the Manager, Local Switched Network
4 Planning- East for WorldCom, Inc. My business address is 22001 Loudoun County
5 Parkway, Ashburn, Virginia 20147.

6 A. My name is Gary Ball. I am Vice President of State Regulatory Policy
7 Development for WorldCom, Inc. My business address is 5 International Drive, Rye
8 Brook, N.Y. 10573.

9
10 **Q. Please describe your responsibilities at WorldCom.**

11 A. Grieco. My responsibilities as Manager, Local Switched Network Planning- East
12 include developing and maintaining local network architecture plans between WorldCom,
13 Inc. and other carriers so that our customers can originate and terminate phone calls from
14 customers of those other carriers.

15 A. Ball. My responsibilities as Vice President of State Regulatory Policy
16 Development include the development of WorldCom's positions on state regulatory
17 matters and to serve as WorldCom's representative with various members of the
18 telecommunications industry. I also oversee the resolution of disputes dealing with
19 reciprocal compensation for traffic terminated to Internet Service Providers (ISPs).

20
21 **Q. Please describe your relevant experience and background.**

22 A. Grieco. I have been employed by MCI/WorldCom since 1987 and have held
23 various positions in Operations, Field Engineering, Local Network Planning and

1 Management. I graduated from Northeastern University in 1987 with a BS in Electrical
2 Engineering Technology.

3 A. Ball. I have worked in the telephone industry for ten years. I have worked for
4 Rochester Telephone Corporation, Teleport Communications Group, Inc., MFS
5 Communications Company, Inc. and for WorldCom, Inc. My responsibilities throughout
6 my career have included project management for the rollout of an advanced private line
7 service; development of an outside plant fundamental plan for a central office,
8 development and implementation of regulatory policies; acting as lead negotiator for
9 interconnection agreements with NYNEX, Verizon and Southern New England
10 Telephone Company, and ultimately, national responsibility for state regulatory policy
11 issues. I have appeared as a company witness on various regulatory matters in 17 states
12 and at the Federal Communications Commission. I have a Bachelor of Science degree in
13 Electrical Engineering from the University of Michigan and an MBA from the University
14 of North Carolina.

15
16 **Q. What is the purpose of your testimony?**

17 A. Grieco. The purpose of my testimony is to discuss the engineering and network
18 architecture aspects of co-carrier interconnection.

19 A. Ball. The purpose of my testimony is to discuss issues related to intercarrier
20 compensation and the regulatory policy and reciprocal compensation aspects of
21 interconnection between two co-carriers.

1 **Q. What is the history and nature of WorldCom's network?**

2 A. WorldCom's local affiliates began as special access providers, also known as
3 competitive access providers (CAP). CAPs provide high capacity network transport
4 facilities to mid-sized and large business customers for the purpose of originating and
5 terminating interexchange traffic directly to or from the interexchange carrier. As such,
6 WorldCom's original network consisted of a limited set of fiber optic rings in several
7 urban areas used to connect to customer points of presence ("POPs"), ILEC central
8 offices ("C.O.s") and IXC POPs.

9 In January 1994, the MFS local affiliate of WorldCom made the decision to
10 expand from traditional CAP services and began offering switched local services.
11 Beginning with the fiber rings, the company embarked on a capital construction program
12 with two major goals. First, with local switched service customers in mind, the company
13 had to expand its existing fiber ring facilities to reach more customer buildings, and
14 construct new rings in other urban areas. These rings passed by many ILEC C.O.s so that
15 ILEC controlled customer loops could be accessed by WorldCom. Second, WorldCom
16 had to install local switches to provide switched services. WorldCom has invested
17 hundreds of millions of dollars in its local network. As a result, as of the date of our
18 testimony, WorldCom's local networks, nationwide, consist of approximately 8,196 local
19 route miles of fiber rings and 141 active local switches. Currently, in Virginia WorldCom
20 has approximately 439 route miles of local fiber and 2 active local switches.

21 While WorldCom's local network is growing, it is still small compared to the
22 ubiquitous reach of the Verizon network. While WorldCom has been building local
23 networks for about six years, the ILECs have been building local networks for more than

1 one hundred years. While WorldCom's local network connects to perhaps several
2 thousand buildings in mostly urban areas, the ILECs' networks reach into practically
3 every building and home in the country. While WorldCom has installed 113 local
4 switches, the ILECs collectively own over 23,000 local switches. It is not an
5 overstatement to say that the ILECs' networks are practically everywhere.

6
7 **Q. Is WorldCom's network like Verizon's?**

8 A. No. While WorldCom's local network has the same capabilities and overall
9 functionality, for interconnection purposes, it has a substantially different architecture
10 than that of Verizon. ILEC networks, developed over many decades, employ an
11 architecture characterized by a large number of switches within a hierarchical system,
12 with relatively short copper based subscriber loops. By contrast, WorldCom's local
13 network employs state-of-the-art equipment and design principles based on the
14 technology available today, particularly optical fiber rings utilizing SONET transmission.
15 In general, using this transmission based architecture, it is possible for WorldCom to
16 access a much larger geographic area from a single switch than does the ILEC switch in
17 the traditional copper based architecture. This is why, in any given service territory,
18 WorldCom has deployed fewer switches than the ILEC. Any CLEC will begin serving a
19 metropolitan area with a single switch and grow to multiple switches as its customer base
20 grows.

21 In general, at least for now, WorldCom's switches serve 11 Virginia rate centers
22 which are also served by the ILEC with its tandem and subtending end office
23 architecture. Specifically, in providing service to the Virginia rate centers in LATA 236,

1 Verizon uses approximately 12 local / access tandems and 62 end office switches to serve
2 these same rate centers. WorldCom uses just 2 switches in serving these 11 rate centers.
3 WorldCom is able to serve such large geographic areas via its extensive transport
4 network and bears the costs of that owned network. Thus, each one of WorldCom's
5 switches serving these Virginia rate centers covers an area that is comparable to if not
6 greater than the service area of any of the 12 tandem switches used by Verizon in serving
7 this same area.

8 WorldCom's recent experience in deploying local services gives it a unique
9 perspective on what it takes to make competition a reality. Our "hands on" experience in
10 deploying efficient, high quality local networks offering innovative services allows us to
11 be very clear on what will be required to implement network interconnection. CLECs
12 need flexibility in the way they configure and operate their networks, and interconnect
13 with ILECs, to achieve the network and cost efficiencies that are necessary to fulfill the
14 great promises of local competition. Interconnection requirements should not be molded
15 to suit the historic embedded network of the ILECs, but also should recognize and
16 promote the different, efficient, reliable, innovative nature of growing CLEC networks.

17
18 **Q. How are the ILEC and CLEC networks interconnected?**

19 A. Building a local network means nothing unless that network can be seamlessly
20 interconnected with the ILEC's network and with the networks of other
21 telecommunications carriers. The point at which WorldCom's local network physically
22 connects to the ILEC's network is called the point of interconnection (POI). This

1 definition of "interconnection" is consistent with how the FCC defined that term in its
2 Local Competition Order (Order at Paragraph 176).

3
4 **Q. What role does the POI play in interconnection?**

5 A. The POI plays a critical role in interconnection. From a financial perspective, the
6 POI represents the "financial demarcation" - the point where WorldCom's network ends
7 and the ILEC's "transport and termination" charges begin, and visa versa. From an
8 engineering perspective, there are a variety of things that must happen at the POI to make
9 interconnection seamless and complete. It should also be noted that over this physical
10 interconnection there is a "logical interconnection" of the networks—i.e. the trunk groups
11 that connect CLEC and ILEC switches traversing the "physical interconnection."

12
13 **Q. Please describe, with more specificity, how the "physical interconnection" is**
14 **achieved?**

15 A. The physical linking of networks is not a daunting engineering task. Carriers have
16 interconnected networks - local network to local network and interexchange network to
17 local network - for years. Thus, physical linking is neither new nor overly complicated.
18 Physical linking of networks involves the following steps:

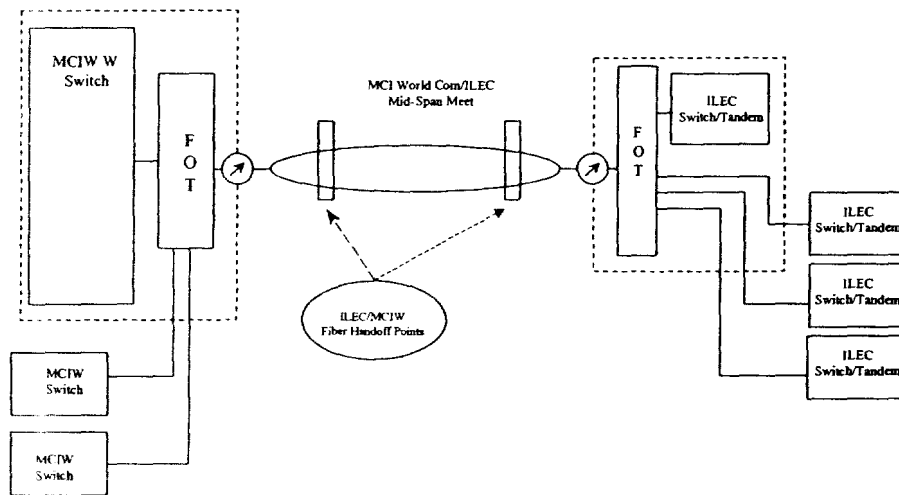
- 19 ▪ Physically connecting WorldCom's facilities to Verizon's facilities at the
20 point of interconnection.
- 21 ▪ Establish trunking arrangements for the exchange of local traffic, for the
22 exchange of intraLATA and interLATA toll traffic, for "operator-to-

operator" calls, for directory assistance calls, for 911 /E911 calls, and for "transit" traffic.

- Physically connecting WorldCom's signaling network and the ILEC's signaling network so that signaling information can be exchanged.

From an engineering perspective, establishing the POI includes the determination of where the POI is located, the method of interconnection, and the types of facilities that will be used to carry traffic back and forth over the POI. The following diagram depicts WorldCom's preferred network architecture. This interconnection method is discussed in detail under Issue III-3.

MCIW-ILEC Preferred Interconnection Architecture Mid-Span Meet Network Facility Configuration



MCIW Proprietary

In engineering terms, facilities are connected to each other at what are called "cross-connect points." Cross-connect points are places in any network where one facility can be connected to another, either manually or electronically. With a manual cross connect, two facilities are physically connected by means of a third piece called a

1 "jumper." Simply put: Wire A comes in to a point on the cross connect apparatus, and
2 Wire B comes in on another point. Then a jumper is used to connect Wire A to Wire B.
3 A main distribution frame (MDF) or any similar "patch panel" is an example of a manual
4 cross-connect device. With an electronic cross-connect, there is no jumper wire, rather,
5 the "jumper connection" is performed electronically. A DCS (digital cross connect
6 system) is an example of an electronic cross connect.

1 **Q. Please describe how traffic travels over the facilities and arrangements**
2 **described above.**

3 A. Once networks are physically connected via the facilities and arrangements I have
4 just described, it is necessary from an engineering perspective to partition those facilities
5 into various types of trunk groups required to carry the different types of interconnection
6 traffic. Based on our experience, we believe that traffic should be segregated as follows:

- 7 • A separate trunk group that carries local traffic, non-equal access intraLATA
8 interexchange (toll) traffic, and local transit traffic to other LECs.
- 9 • A separate trunk group for equal access inter-LATA or intraLATA
10 interexchange traffic that transits the ILEC network.
- 11 • Separate trunks connecting WorldCom's switch to each 911/E911 tandem.
- 12 • A separate trunk group connecting WorldCom's switch to Verizon's operator
13 service center. This permits WorldCom's operators to talk to Verizon's
14 operators. Operator-to-operator connection is critical to ensure that operator
15 assisted emergency calls are handled correctly.
- 16 • A separate trunk group connecting WorldCom's switch to the Verizon
17 directory assistance center if WorldCom is purchasing Verizon's directory
18 assistance service.

19 All of these trunk groups should be provisioned over the mid-span fiber meet
20 discussed under Issue III-3. This is the most efficient use of resources for both
21 companies. With regard to the first requested trunk group, it should be noted that there is
22 no technical requirement to segregate local, intraLATA interexchange (toll), and transit
23 traffic on separate trunk groups. Indeed, it is often more efficient to "pack" a trunk group

1 with both local traffic, intraLATA interexchange (toll), and transit traffic. Because these
2 types of traffic are "rated" differently, the receiving carrier will either have to have a way
3 to discern the jurisdiction of the traffic (for example, calling party number or "CPN") or
4 rely on reporting by the sending carrier, via a "percent local usage" (PLU) or similar
5 reporting mechanism.

6 The trunk segregation detailed above is an initial architecture that meets
7 WorldCom's immediate needs for interconnection. The trunks that carry local,
8 intraLATA interexchange (toll), and transit traffic are generally similar to the industry
9 standard Feature Group D trunks with CCS7 signaling. WorldCom requires CCS7
10 signaling on all trunks used to pass local, intraLATA interexchange (toll), and transit
11 traffic. WorldCom also requests that the trunks used to carry local, interexchange
12 intraLATA (toll), and transit traffic be configured with B8ZS line coding and Extended
13 Superframe (ESF), if available. B8ZS is required to support the transmission of 64Kbps
14 ("Clear Channel") traffic between the networks of ILECs and CLECs, and ESF is
15 required to support diagnostic and error-checking protocols. Without Clear Channel
16 transmission, subscribers of ILECs and CLECs would not be able to terminate various
17 types of switched data traffic, including some ISDN applications.

18 19 **ISSUE I-1**

20 *Does MCIW, as the requesting carrier, have the right pursuant to the Act,*
21 *the FCC's Local Competition Order, and other FCC regulations, to*
22 *designate the network point (or points) of interconnection at any*

1 *technically feasible point, including a single point of interconnection per*
2 *LATA? (Attachment IV, Sections 1.1.2 and 1.3.1*
3

4 **Q. Please summarize WorldCom’s position on this issue.**

5 A. WorldCom believes that, as a requesting carrier, it has a right to designate any
6 technically feasible point of interconnection, including a single point of interconnection
7 per LATA.

8
9 **Q. What contract language has WorldCom proposed on this issue?**

10 A. WorldCom has proposed language setting forth its right under the Act to choose
11 any technically feasible point of interconnection. Attachment IV, Section 1.1.2. This
12 includes WorldCom’s right to designate a single point of interconnection, such as a
13 Verizon tandem, for LATA-wide termination. WorldCom has proposed section 1.3.1 of
14 Attachment IV which provides that “MCIm may elect LATA Wide Terminating
15 Interconnection with Verizon. Under such an arrangement, the parties will establish
16 Local Interconnection Trunk Groups to a single Verizon Access Tandem in a LATA in
17 which MCIm originates Local Interconnection Traffic and interconnects with Verizon.”

18
19 **Q. What is Verizon’s position on this issue?**

20 A. Verizon has taken the position that it can require WorldCom to designate multiple
21 interconnection points at which WorldCom must receive traffic which originates on
22 Verizon’s network. As discussed below, the FCC’s regulations impose an obligation on
23 Verizon to permit interconnection of new entrant facilities at any technically feasible

1 point, including a single point per LATA, and they do not grant Verizon the right to
2 impose multiple points of interconnection on CLEC's. Moreover, Verizon's proposal to
3 designate several points of interconnection per LATA will either require WorldCom to
4 build facilities to Verizon end offices unnecessarily or pay to transport Verizon originated
5 traffic. Verizon's position is inconsistent with the FCC's policy that new entrants may
6 choose any technically feasible point of interconnection, including a single point per
7 LATA, and is inconsistent with development of efficient network architecture. Verizon's
8 proposal is discussed in more detail at page19, infra.

9
10 **Q. What is WorldCom's response to Verizon's position on this issue?**

11 A. In considering this issue it is useful to keep in mind the following four principles
12 which the Commission has developed in its various orders:

- 13 • A CLEC has the right to designate any technically feasible point of
14 interconnection, including a single point of interconnection per LATA;
- 15 • An ILEC cannot compel a CLEC to establish multiple points of
16 interconnection, although a CLEC is free to voluntarily agree to multiple
17 points;
- 18 • A LEC cannot assess charges on another LEC for traffic that originates on the
19 LEC's network;
- 20 • A LEC is financially responsible to provide transport for its originating traffic
21 to the other LEC's terminating switch serving the end user.

1 As discussed below, Verizon's proposed interconnection terms violate each of
2 these principles. WorldCom's proposal is consistent with each.

3
4 **Q. Should WorldCom, or any other CLEC, be required to build all of the**
5 **interconnection facilities, even in areas where it has only minimal business?**

6 A. It appears that Verizon would like for WorldCom to, in effect, build 100% of the
7 interconnection facilities to multiple points throughout the Verizon network.

8 WorldCom's proposal, on the other hand, requires that WorldCom and Verizon jointly
9 provision the fiber optic facilities that connect the two networks, and share the financial
10 and other responsibilities (as detailed above) for that facility.

11 It is not cost justifiable in a business case for a CLEC to build a transport network
12 to areas within a LATA where the CLEC has only minimal business. A CLEC should
13 not be required to build facilities in areas in which it does not have a large customer base.
14 A requirement that a CLEC build facilities where it does minimal business imposes a
15 significant financial burden on a CLEC.

16
17 **Q. Is interconnection at a single point in a LATA technically feasible?**

18 A. Yes it is. For example, Verizon covers the Metropolitan New York City area
19 LATA with six access tandems. Clearly, for a new entrant such as WorldCom,
20 physically building out facilities to establish a POI at each of those access tandems would
21 be a time consuming and expensive proposition. Moreover, requiring a build out to each
22 tandem would impose an unnecessary expense on WorldCom. Such a requirement is
23 inefficient and would serve only to delay the ability of WorldCom to offer service in that

1 LATA and artificially and unnecessarily increase the cost of implementing a local
2 network. The “technical feasibility” portion of the FCC Local Competition Order
3 precludes Verizon from insisting on the build out. WorldCom has an already established
4 POI with Verizon in Manhattan. Because of Verizon’s extensive transport network in
5 the LATA, it is technically feasible for Verizon to take traffic from that POI and transport
6 it to any end office in the LATA, regardless of which access tandem that end office
7 subtends. Therefore, that POI can, and at WorldCom’s discretion should, serve as the
8 POI for the entire LATA. Similarly, it is technically feasible for Verizon to terminate
9 calls throughout a LATA in Virginia from a single tandem used as the point of
10 interconnection.

11
12 **Q. Do the Act and the FCC regulations establish WorldCom’s right to choose a**
13 **single technically feasible point of interconnection?**

14 A. Yes they do. The Act provides that Verizon has the “duty to provide, for the
15 facilities and equipment of any requesting telecommunications carrier, interconnection
16 with the local exchange carrier’s network ... at any technically feasible point within the
17 carrier’s network.” 47 U.S.C. § 251 (c)(2). FCC Rule 51.305 (a)(2) identifies the
18 minimum set of places where ILECs must provide interconnection, but explicitly states
19 that interconnection must be provided “at any technically feasible point within the
20 incumbent network.” The FCC rules do not require a POI at a location in each Verizon
21 local calling area, as Verizon proposes.

22 The FCC’s Local Competition Order sets forth the right of competing carriers to
23 choose the point of interconnection: “The interconnection obligation of section

1 251(c)(2), discussed in this section, allows competing carriers to choose the most
2 efficient points at which to exchange traffic with incumbent LECs, thereby lowering the
3 competing carrier's costs of, among other things, transport and termination of traffic.”
4 Local Competition Order, ¶172 (emphasis added).

5 The FCC also stated that “of course, requesting carriers have the right to select
6 points of interconnection at which to exchange traffic with an incumbent LEC under
7 section 251 (c) (2).” Local Competition Order ¶ 220, n.464. It is the requesting carrier,
8 not the incumbent, who is given the right to choose the interconnection point.¹

9 More recently, in its Texas 271 Order, the FCC has ruled that a CLEC may
10 choose to interconnect with an ILEC at a single point. The FCC explained that:

11 Section 251, and our implementing rules, require an incumbent LEC to allow a
12 competitive LEC to interconnect at any technically feasible point. This means
13 that a competitive LEC has the option to interconnect at only one technically
14 feasible point in each LATA. (Texas 271 Order ¶ 77)

15 Section 251(c) of the Act imposes specific obligations upon Verizon as an
16 incumbent local exchange carrier. Among these obligations is the duty to provide for the
17 facilities and equipment of any requesting telecommunications carrier interconnection at
18 any technically feasible point. The FCC has noted that this obligation is imposed upon
19 incumbent LECs only, not upon new entrants. Act, Section 251(c) (2). The Act imposes
20 interconnection duties on ILECs such as Verizon and grants interconnection rights, such
21 as the right to choose any technically feasible interconnection point, to requesting carriers
22 such as WorldCom.

1 **Q. What rules of the road should govern co-carrier interconnection?**

2 A. In the multi-carrier environment which the Act is intended to foster, there must
3 be clear rules of the road setting forth the methods by which competing co-carriers
4 collaborate to exchange calls. The most reasonable approach is to require carriers to
5 deliver their originating traffic to the network of the co-carrier who serves the called
6 party, who then is responsible for termination of the call.

7 The FCC has addressed this matter and has endorsed rules of the road similar to
8 that described above. More generally, the FCC has clearly described the responsibility of
9 a carrier to deliver its originating traffic to a co-carrier for termination. It has explained
10 the basic interconnection architecture to be employed by co-carriers. The FCC places the
11 responsibility for costs associated with originating traffic on the carrier that originates the
12 call when the originated traffic must be delivered to another carrier's network for
13 completion. This responsibility includes the facilities necessary to deliver the call to a
14 co-carrier's network. On June 21, 2000, the FCC issued its Memorandum Opinion and
15 Order in *TSR Wireless*.² The M O&O reviewed the framework by which carriers recover
16 costs incurred in carrying both originating and terminating traffic. The FCC describes the
17 obligations of a carrier when its customers originate traffic as follows:

18 The Local Competition Order requires a carrier to pay the cost of facilities used to
19 deliver traffic originated by that carrier to the network of its co-carrier, who then
20 terminates that traffic and bills the originating carrier for termination
21 compensation. In essence, the originating carrier holds itself out as being capable

¹ Also, as Paragraph 198 of the *FCC's Local Competition Order* notes, "technically feasible" under this definition "refers solely to technical or operational concerns, rather than economic, space or site considerations."

1 of transmitting a telephone call to any end-user, and is responsible for paying the
2 cost of delivering the call to the network of the co-carrier who will then terminate
3 the call. Under the Commission's regulations, the cost of the facilities used to
4 deliver this traffic is the originating carrier's responsibility, because these
5 facilities are part of the originating carrier's network. The originating carrier
6 recovers the costs of these facilities through the rates it charges its own customers
7 for making calls. This regime represents "rules of the road" under which all
8 carriers operate, and which make it possible for one company's customer to call
9 any other customer even if that customer is served by another telephone company.
10 (TSR Wireless, ¶ 34)

11 Verizon's proposal is not consistent with the rules of the road established by the
12 FCC. Verizon's proposal will relieve it of the obligation to deliver its originating traffic
13 to the network of a co-carrier and instead shifts the cost of facilities used to deliver these
14 originating calls to the co-carrier.

15 In contrast WorldCom's interconnection proposal is consistent with the rules of
16 the road established by the FCC. WorldCom proposes that each carrier bear the financial
17 responsibility of delivering its originating traffic to the other carrier's network. Each
18 carrier then has the responsibility to terminate that traffic to its customers, and the right to
19 receive reciprocal compensation for the transport and termination of that traffic.

² In re: TSR Wireless, LLC, et al v. U.S. West, et. al., File Nos. E-98-13, E-98-15, E-98-16, E-98-17, E-98-18, FCC 00-194 (released June 21, 2000).

1 **Q. Have the courts addressed the right of a new entrant to designate any**
2 **technically feasible point of interconnection?**

3 A. WorldCom's right under the Act to choose the point of interconnection also has
4 been affirmed by the Courts. For example, the United States District Court for the
5 Middle District of Pennsylvania affirmed a Magistrate's decision establishing MCI's
6 right to interconnect at a single technically feasible point of interconnection and reversing
7 a decision by the Pennsylvania Public Utility Commission specifying multiple points of
8 interconnection. *MCI v. Verizon-Pennsylvania*, Civil No. 1:CV-97-1857, Memorandum
9 and Order, p. 14 (U.S.D.C. for the Middle District of Pennsylvania, June 30, 2000). The
10 Magistrate ruled as follows:

11 The PUC's decision to require MCI to interconnect with Verizon's network in
12 every access tandem serving area is inconsistent with the Act and FCC
13 regulations. In the absence of proof by Verizon that it is not technically feasible
14 for MCI to have only one point of interconnection in each LATA, the agreement
15 must permit MCI to establish a single point of interconnection per LATA
16 consistent with the Act and FCC regulations. . . . As the FCC notes, under the
17 FCC's interpretation new entrants may select the most efficient points at which to
18 exchange traffic with incumbent LEC's thereby lowering the competing carrier's
19 cost of, among other things, transportation and termination, [citing FCC Order ¶
20 172].

21 *MCI v. Verizon-Pennsylvania*, Civil No. CV-97-1857, Report and Recommendation, p.
22 36-37, (U.S.D.C. for the Middle District of Pennsylvania, September 16, 1999.)

1 The Ninth Circuit Court of Appeals, similarly, has upheld provisions in the
2 MFS/US West Interconnection Agreement permitting a single point of interconnection
3 per LATA at the tandem, noting that “[t]he plain language requires local exchange
4 carriers to permit interconnection at any technically feasible point within the carrier’s
5 network.” *US West Communications v. MFS Intelenet*, 193 F.3d 1112 (9th Cir. 1999).³

6
7 **Q. Accordingly, what does WorldCom request of this Commission?**

8 A. Having addressed the benefits in efficiency, innovation and service quality
9 inherent in WorldCom’s proposed interconnection architecture, we request that this
10 Commission adopt WorldCom’s proposed language on this issue. Doing so will facilitate
11 contract formation following issuance of the arbitration order.

12
13 **Q. What are the interconnection terms proposed by Verizon?**

14 A. The Verizon template imposes on WorldCom an obligation to establish an
15 interconnection point in each Verizon Rate Center Area. (Verizon proposed section 7.1.1-
16 7.1.1.1) Verizon proposes that its obligation to deliver its traffic to WorldCom ends at
17 this point. Thus, Verizon may deliver its originating traffic to its end office and no
18 farther. (Verizon section 7.1.4) Verizon expects WorldCom to provide transport and
19 termination of Verizon’s originating traffic from that point. (Verizon section 7.1.1)
20 Verizon proposes that WorldCom bear the financial responsibility of transporting

³ See also *US West v. Garvey*, File No. Civ. 97-913, 1999 U.S. Dist. LEXIS 22042, (U.S. District Court for Minnesota, March 31, 1999) and *MCI v. U.S. West*, Case No. C97-1508R, 1998 U.S. Dist. LEXIS 21585 (U.S. District Court for Western District of Washington, July 21, 1998) rejecting ILEC claims that a CLEC must establish a POI in each ILEC local calling area.

1 Verizon's originating traffic the entire way from Verizon's end office to WorldCom's
2 network. (Verizon section 7.2)

3 The Verizon template also imposes on WorldCom an obligation to transform
4 WorldCom collocations (which are not necessarily used for interconnection but rather to
5 access UNEs) into WorldCom points of interconnection. If WorldCom does not do so,
6 Verizon proposes to pay, as reciprocal compensation, the end office reciprocal
7 compensation rate less Verizon's transport and tandem switching rates. In short, Verizon
8 proposes to charge transport and tandem switching rates to WorldCom on Verizon's
9 originating traffic. (Verizon section 7.1.1.2)

10 Next, Verizon proposes that it may compel WorldCom to establish new multiple
11 points of interconnection in any LATA where the carriers are already interconnected, and
12 that if WorldCom does not do so, Verizon proposes to pay, as reciprocal compensation,
13 the end office reciprocal compensation rate less Verizon's transport and tandem
14 switching rates. (Verizon section 7.1.1.3) In short, Verizon proposes to charge transport
15 and tandem switching rates to WorldCom on Verizon's originating traffic.⁴

16
17 **Q. What is WorldCom's response to the interconnection terms proposed by**
18 **Verizon?**

19 **A.** The practical effect of Verizon's provisions are to require WorldCom to either
20 add interconnection facilities where they may not be justified on the basis of traffic
21 volumes or alternatively to require WorldCom to pay for the transport of traffic
22 originated by Verizon.

⁴. The relevant portions of the Verizon template are attached hereto as Exhibit A.

Verizon's interconnection point language is inconsistent with 1) a CLEC's right to design its own network and choose efficient points of interconnection, including a single point of interconnection per LATA; 2) WorldCom's right to receive symmetrical reciprocal compensation payments; 3) FCC regulations which bar a LEC from assessing charges on another LEC for traffic which originates on the LEC's network; 4) a LEC's obligation to deliver its originating traffic to a co-carrier's network; and 5) a CLEC's right to pay a TELRIC compliant rate for interconnection trunks if the CLEC chooses to order such trunks from Verizon.

Q. Is Verizon's proposal consistent with WorldCom's right under the Act, the FCC's Local Competition Order, and FCC regulations to design its own network and choose efficient points of interconnection?

A. It is not. WorldCom has the right, pursuant to the Act, the FCC's Local Competition Order, and FCC regulations to build its network in the most economic fashion possible and to designate the network point (or points) of interconnection at any technically feasible point.

As previously noted, the Act imposes upon Verizon the duty to provide for the facilities and equipment of any requesting telecommunications carrier interconnection at any technically feasible point.⁵ The FCC has noted that this obligation is imposed upon incumbent LECs only, not upon new entrants.⁶ The Act imposes interconnection duties on ILECs and grants interconnection rights, such as the right to choose any technically

⁵ Section 251(c)(2).

⁶ Local Competition Order, ¶¶ 184, 220.

1 feasible interconnection point, to requesting carriers such as WorldCom.⁷ Verizon's
2 proposed language turns these rules on their head and imposes an obligation on
3 WorldCom to interconnect at multiple points that Verizon deems "relevant." In doing so,
4 Verizon proposes to violate WorldCom's right to designate the point of interconnection.

5 Verizon's proposed language unilaterally establishes the Verizon end office as the
6 interconnection point for traffic it originates.⁸ In this way, Verizon seeks to force
7 WorldCom to build facilities or to pay to transport *Verizon traffic* to WorldCom's
8 network. Verizon's position is inconsistent with the FCC's Local Competition Order,
9 FCC regulations, and the provisions of the Act-- which do not require WorldCom to
10 extend its facilities as Verizon would have, but do impose on Verizon the obligation to
11 provide interconnection for WorldCom facilities at points designated by WorldCom.
12 Moreover, Verizon's proposal in effect requires WorldCom to construct a network which
13 looks like Verizon's. This is inconsistent with the notion that new entrants are entitled to
14 design their own networks as efficiently as they can.

15
16 **Q. Does Verizon's proposal deprive WorldCom of symmetrical reciprocal**
17 **compensation payments required under FCC regulations?**

18 A. Yes it does. Verizon's "relevant interconnection point" language also effectively
19 deprives WorldCom of its right to a non-discriminatory reciprocal compensation
20 payment. As noted above, Verizon's proposal provides that unless WorldCom
21 establishes multiple points of interconnection, WorldCom can receive as reciprocal

⁷ The FCC has held that "[o]f course, requesting carriers have the right to select points of interconnection at which to exchange traffic with an incumbent LEC under section 251(c)(2)." Local Competition Order, ¶220, fn. 464.

1 compensation only the End Office Reciprocal Compensation rate less transport and
2 tandem switching charges.

3 Verizon's interconnection point language is inconsistent with FCC regulations
4 which require symmetrical reciprocal compensation. 47 CFR 51.711(a)(1) requires that
5 rates for transport and termination be symmetrical and defines symmetrical rates as "rates
6 that a carrier other than an incumbent LEC assesses upon an incumbent LEC for transport
7 and termination of local telecommunications traffic equal to those that the incumbent
8 LEC assesses upon the other carrier for the same services." Verizon's proposal
9 specifically provides that WorldCom shall receive less reciprocal compensation than
10 Verizon does and is therefore inconsistent with WorldCom's right to charge symmetrical
11 reciprocal compensation.

12
13 **Q. Does Verizon's proposal impose charges on WorldCom for traffic which**
14 **originates on Verizon's network?**

15 A. Yes. Verizon's proposal imposes charges on WorldCom for traffic which
16 originates on Verizon's network, and in doing so it directly contradicts 47 CFR
17 51.703(b). This regulation provides that "A LEC may not assess charges on any other
18 telecommunications carrier for local telecommunications traffic that originates on the
19 LEC's network." As noted above, Verizon proposes in its sections 7.1.1.2 and 7.1.1.3 to
20 charge transport fees to WorldCom for traffic that originates on Verizon's network. This
21 language permitting Verizon to charge transport to WorldCom for traffic originating on
22 the Verizon network is prohibited by 47 CFR 51.703(b).

⁸ Verizon's proposal requires WorldCom to assume responsibility for Verizon originated traffic at a Verizon end office by either building facilities to that office or by paying for the cost of transporting such

Moreover, Verizon's proposal (in section 7.1.1.1) that CLECs establish POIs in each Verizon rate center area forces CLECs to transport Verizon's traffic all the way from Verizon's end office to the CLEC network. This proposal is the functional and financial equivalent of charging the CLEC for such transport of Verizon originating traffic. Verizon is seeking to transfer to the CLEC the cost of transporting Verizon traffic. Verizon should not be permitted to accomplish indirectly—by designating multiple POIs—what it is prohibited from accomplishing directly by 47 CFR 51.703 (b).

Q. Has the FCC reviewed an interconnection proposal similar to that proposed by Verizon?

A. Yes it has. In its Kansas/Oklahoma 271 Order the Commission addressed an interconnection proposal from SWBT which was construed by some parties to be similar to that now proposed by Verizon.⁹ The Commission noted the comments made by some parties that SWBT in effect was denying competing carriers the right to select a single point of interconnection by improperly shifting transport costs to them. SWBT disputed that it was taking the position that Verizon is taking here, but the Commission cautioned SWBT, nevertheless, that its decision to allow a single point of interconnection did not change an ILEC's reciprocal compensation obligations and 2) that the Commission's rules preclude an incumbent LEC from charging carriers for local traffic that originates on the incumbent LEC's network. Verizon's multiple interconnection point proposal suffers from both of the infirmities noted by the Commission in the SBC case.

traffic.

⁹ Joint Application by SBC Communications Inc. for Provision of In-Region InterLATA Services in Kansas and Oklahoma, CC Docket No. 00-217, Memorandum Opinion and Order at ¶ 235 (rel. Jan.22, 2001).

1 **Q. Have any state public utility commission’s reviewed an interconnection**
2 **proposal similar to that proposed by Verizon?**

3 **A. Yes. The Massachusetts Department of Telecommunication and Energy has**
4 **rejected Verizon’s proposal to impose multiple points of interconnection and its twin**
5 **proposal that CLECs must pay for transport of Verizon’s originating traffic:**

6
7 Regarding Verizon’s request that the Department approve its proposal to
8 require MediaOne and Greater Media to provide IPs at or near each of
9 Verizon's tandems, neither the Act nor the FCC's rules requires MediaOne
10 or any CLEC to interconnect at multiple points within a LATA to satisfy an
11 incumbent's preference for geographically relevant interconnection points.
12 See *Id.* at ¶¶ 198-199.

13
14 Therefore, we find that a CLEC may designate a single IP for
15 interconnection with an incumbent even though that CLEC may be
16 serving a large geographic area that encompasses multiple ILEC tandems
17 and end offices. There is no requirement or even preference under federal
18 law that a CLEC replicate or in a lesser way mirror an ILEC's network.
19 Indeed, the Act created a preference for CLECs to design and engineer in
20 the most efficient way possible, which Congress envisioned could be
21 markedly different than the ILECs networks. *Id.* at ¶ 172.

1 Regarding Verizon's argument that if MediaOne and Greater Media do not
2 establish "geographically relevant" IPs, they would be obligated to pay
3 Verizon's transport costs, Verizon has pointed to nothing in the Act or FCC
4 rules requiring CLECs to pay the transport costs that Verizon will incur to
5 haul its traffic between Verizon's IP and the meet point. The FCC
6 envisioned both carriers paying their share of the transport costs to haul
7 traffic to the meet point under the interconnection rules. Verizon's cite to
8 the FCC's language regarding "expensive interconnection" is not on point
9 because the FCC there was referring to interconnection costs -- not
10 transport costs.

11 *Petition of Media One, Inc. and New England Telephone and Telegraph, for arbitration,*
12 D.T.E 99-42/43, 99-52, p. 25 (Mass. DTE August 25, 1999).

14 **Q. What methods of interconnection has Verizon proposed that WorldCom use?**

15 A. Verizon has asserted with respect to this issue that it has proposed a list of
16 possible methods WorldCom can use to interconnect with it.¹⁰ One of the possible
17 methods offered by Verizon is the lease of an entrance facility and transport bought out
18 of Verizon's access tariff at above-cost rates. (See Verizon proposed Interconnection
19 Attachment, section 2.1.2.3).

20 **Q. What is the proper pricing of interconnection trunks in the event WorldCom**
21 **chooses to purchase trunks from Verizon?**

22 A. If WorldCom chose to purchase interconnection trunks from Verizon the
23 appropriate rate to be paid for the trunks would be the TELRIC compliant rate for

1 unbundled dedicated transport. Verizon on the other hand has proposed that leased
2 trunks should be purchased out of the Verizon access tariff. For trunks ordered by
3 WorldCom, and operated exclusively to carry WorldCom originated traffic, the
4 appropriate rate is that for unbundled transport. For shared trunks, the cost should be
5 shared by both parties in proportion to their respective use of the shared trunk facility.
6 These pricing rules are consistent with the guidelines established by the FCC in the Local
7 Competition Order. The FCC has ruled that interconnection trunks should be priced
8 equal to the unbundled network element of dedicated transport. Further, the FCC has
9 ruled that if interconnection trunks are shared, each carrier should pay a proportionate
10 share of the cost based on each carrier's originating traffic.¹¹

11
12 **Q. Accordingly, what does WorldCom request of the Commission on this issue?**

13 **A.** WorldCom requests that the Commission rule that Verizon's proposal to charge
14 access rates for interconnection trunks is barred by the Commission's rules.

¹⁰ Verizon Response to Unresolved Issues, p.14

¹¹ "Finally, in establishing the rates for transmission facilities that are dedicated to the transmission of traffic between two networks, state commissions should be guided by the default price level we are adopting for the unbundled element of dedicated transport. ...The amount an interconnecting carrier pays for dedicated transport is to be proportional to its relative use of the dedicated facility. For example, if the providing carrier provides one-way trunks that the interconnecting carrier uses exclusively for sending terminating traffic to the providing carrier, then the interconnecting carrier is to pay the providing carrier a rate that recovers the full forward-looking economic cost of those trunks." Local Competition Order ¶ 1062. The FCC went on to rule that interconnecting carriers should not have to pay for one-way trunks which carry the incumbent's originating traffic and that where trunks are shared the interconnecting carrier should pay a rate that reflects only the portion of the trunk capacity that the carrier uses to send traffic. *Id.*

1 **ISSUE I-2**

2 *Can Verizon require WorldCom to receive Verizon traffic at a Verizon end office*
3 *and then require WorldCom to transport that traffic back to the WorldCom*
4 *network free of charge?*
5

6 **Q. Please describe the dispute that gives rise to this issue.**

7 A. Verizon has proposed an interconnection architecture in which WorldCom is
8 obligated to receive Verizon originated traffic at a point in each Verizon Rate Center
9 Area. Verizon refers to this point as the WorldCom IP. Verizon would then obligate
10 WorldCom to provide transport and termination of Verizon's traffic from that point.
11 Finally, Verizon proposes that no additional charges beyond reciprocal compensation
12 shall apply for the termination of traffic from the IP. The effect of this proposal is to
13 require WorldCom to provide transport of Verizon traffic free of charge.
14

15 **Q. What is WorldCom's response to Verizon's proposal?**

16 A. As indicated by our response to the closely related Issue 1-1 (which we here
17 incorporate by reference) WorldCom believes that this proposal is unreasonable for
18 several reasons. First, it is unreasonable because Verizon seeks to avoid its responsibility
19 to deliver its traffic to WorldCom's network. In many instances, Verizon will deliver its
20 traffic no further than its end office. Verizon seeks to transfer to WorldCom the
21 responsibility to transport Verizon's traffic to the WorldCom network.

22 This provision is also unreasonable in that imposes on WorldCom charges for
23 traffic which originate on Verizon's network in violation of 47 CFR 51. 703(b).

1 Second, the provision stating that no additional charges shall apply beyond
2 reciprocal compensation forces WorldCom to transport Verizon's originated traffic from
3 the Verizon end office (the so-called WorldCom IP) all the way into WorldCom's
4 network free of charge. The reciprocal compensation which WorldCom receives does not
5 provide compensation for this transport.

6 Reciprocal compensation is for "transport and termination *on each carrier's*
7 *network facilities* of local telecommunications traffic that originates on the network
8 facilities of the other carrier." 47 CFR 51.701(e). Reciprocal compensation compensates
9 a terminating carrier for transport and termination services provided *after* the originating
10 carrier delivers its traffic to the terminating carrier's network. As the Commission noted
11 in TSR Wireless, *supra*, "The *Local Competition Order* requires a carrier to pay the cost
12 of facilities used to deliver traffic originated by that carrier to the network of its co-
13 carrier, who then terminates that traffic and bills the originating carrier for termination
14 compensation." Reciprocal compensation does not compensate for transport of the
15 originating carrier's traffic from the originating carrier's network to the terminating
16 carrier's network. Verizon's proposal requires WorldCom to provide this transport
17 service free of charge. Neither would reciprocal compensation, in any way, adequately
18 compensate WorldCom for the additional mileage that WorldCom would have to be
19 responsible for under Verizon's illegal proposal.

20 Of course, WorldCom could voluntarily agree to provide transport service to
21 Verizon to transport Verizon traffic from Verizon's end office to the WorldCom
22 terminating switch. If WorldCom chose to do so, it would be entitled to charge for this
23 transport service. Such charges would be in addition to reciprocal compensation.

1 **Q. What does WorldCom request of the Commission on this issue?**

2 A. The Commission should specifically reject the network architecture and contract
3 language proposed by Verizon. The Commission should adopt the principles set forth
4 below.

5
6 **GENERAL PRINCIPLES:**

- 7 • Verizon's proposal to prohibit a CLEC from charging for transport services
8 is unlawful.
- 9 • Verizon's proposal imposes charges on a CLEC for transport of Verizon's
10 originating traffic, interferes with a CLEC's right to designate a point of
11 interconnection, and is inconsistent with a CLEC's right to symmetrical
12 reciprocal compensation.
- 13 • A LEC is financially responsible to provide transport for its originating traffic
14 to the other LEC's terminating switch serving the end user.

15
16 **Issue I-4**

17 *Should the ICA contain provisions specifying that MCI may choose to establish*
18 *trunking to any given End Office when there is sufficient traffic to route calls*
19 *directly to such End Office and that the charge for such trunks, if they are not*
20 *shared, shall be the transport charges for dedicated transport, and that for shared*
21 *trunks the charges will be shared by both Parties in proportion to their respective*
22 *use of the shared trunk facility?*